

# **GNFAC Avalanche Forecast for Mon Dec 21, 2015**

Good morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Monday, December 21, at 7:30 a.m. Today's advisory is sponsored by [Cooke City Motor Sports](#) and [Lone Peak Brewery](#). This advisory does not apply to operating ski areas.

## **AVALANCHE FATALITY**

A snowmobiler died in an avalanche on Saturday outside of Cooke City. The avalanche occurred on the SE face of Sheep Mountain between Lulu Pass and Round Lake. The slide was triggered from low on the slope by the victim who was subsequently buried six feet deep. The victim had an airbag but was unable to deploy it. The slide also caught two other party members who were parked in the run out zone. One was buried up to his chest while the other was completely buried. They both deployed their air bags and escaped without injury.

Our deepest condolences go out to the victim's family and friends.

## **Mountain Weather**

Overnight the mountains near Big Sky, West Yellowstone and Cooke City picked up 4-5 inches of low density snow. Currently, temperatures range from the single digits to mid-teens F and winds are blowing 15-35 mph out of W-SW. Today, snow will continue in the mountains south of Bozeman with 2-4 inches possible during the day. The mountains around Bozeman could see 1-2 inches. Temperatures will warm into the 20s F and winds will continue to blow 15-35 out of the W-SW. Moisture will continue to be ushered into the area on a westerly flow, producing more snow tonight and tomorrow. The mountains south of Bozeman could see an additional 4-6 inches tonight while the Bridger Range should see 2-3 inches.

## **Snowpack and Avalanche Discussion**

[Bridger Range](#) [Madison Range](#) [Gallatin Range](#)

[Lionhead area near West Yellowstone](#) [Cooke City](#)

Quiet weather yesterday gave the snowpack a well needed breather after near continuous snowfall this past week. Incremental loading during the past seven days has been impressive, with most mountain locations picking up nearly two feet of snow totaling roughly 2" of SWE. This heavy load was enough to tip the scales and produce a widespread natural and human triggered avalanche cycle.

Unfortunately, a snowmobiler died in an avalanche on Saturday outside of Cooke City. Doug and Alex visited the accident site yesterday ([photo](#), [photo](#), [video](#)). This is the first avalanche fatality in Montana and the second this season nationwide. This slide was one of many that occurred over the advisory area in the past week ([photo page](#)).

The most recent notable avalanche occurred yesterday on the Football Field south of Bridger Bowl ([photo](#)). This slide was triggered during control work by the Bridger Bowl Ski Patrol, but it's a good reminder of what's possible in most backcountry locations. There's no question this avalanche could have been triggered by a skier or snowboarder. Fresh avalanches were also observed yesterday in Carrot Basin in the southern Madison Range and on many peaks around Big Sky. Skiers near Hebgen Lake north of West Yellowstone also experienced widespread cracking and collapsing and remotely triggered a large avalanche.

These avalanches all have one thing in common - they're all failing on weak facets near the ground ([video](#), [video](#)). This persistent weak layer is widespread and will continue to produce unstable conditions. As more snow falls today and tomorrow, additional stress will keep this layer highly reactive. Managing terrain will be critical for safe backcountry travel today. Avoid all slopes steeper than 30 degrees as well as low angle slopes attached to larger, steeper slopes above. Triggering slopes from the bottom or from a distance is a real possibility today.

A secondary avalanche concern will be new snow instabilities. As snow and wind continue, wind slabs and storm slabs will become a growing threat. Strong winds out of the W-SW will have plenty of snow available for transport, with will form meaty wind slabs below ridgelines and on the leeward side of cross loaded terrain features. Slides triggered in the new snow could easily step down to facets near the ground producing larger and more dangerous avalanches.

Today, natural and human triggered avalanches are likely on wind loaded slopes and slopes steeper than 35 degrees which have a [HIGH](#) avalanche danger. Less steep, non-wind loaded slopes have a [CONSIDERABLE](#) avalanche danger.

SNOTEL sites in SW Montana are not working which impedes our ability to report snowfall amounts. NRCS is working hard to fix this issue soon.

Doug will issue the next advisory tomorrow morning at 7:30 a.m. If you have any snowpack or avalanche observations to share, drop us a line at [mtavalanche@gmail.com](mailto:mtavalanche@gmail.com) or leave a message at 587-6984.

## **EVENTS and AVALANCHE EDUCATION**

A complete calendar of classes can be found [HERE](#).

**Cooke City**: December 23, *1hr Avalanche Awareness*, Cooke City Visitor's Center, 6-7:30 p.m.

**West Yellowstone**: January 2, *1hr Avalanche Awareness*, West Yellowstone Holliday Inn, 7-8:30 p.m.

**Bozeman**: January 6, *Women's Avalanche Awareness and Beacon 101*, Beall Park, 6-8 p.m.

January 9 and 10, *Companion Rescue Clinic*, REI, Fri 6-8p.m., Sat 10a.m.-2p.m.

January 13, *1hr Avalanche Awareness*, REI, 6-7:30 p.m.

**Livingston**: January 14, *1hr Avalanche Awareness*, Neptune's Brewery, 6-7:30 p.m.

**Dillon**: January 19, *1hr Avalanche Awareness*, UM Western Library, 6:30-8 p.m.

## ***ASMSU Intro to Avalanches w/ Field Course***

January 20, 21 and 23 or 24: <https://www.ticketriver.com/event/16861>

The workshops will be held on Wednesday and Thursday evenings, with a field course on either Saturday or Sunday. Different topics will be presented each evening. Topics include: avalanche terrain recognition, the effect weather has on avalanche hazard, the development of the mountain snowpack, decision making skills, and basic search and rescue procedures.